

ABSTRACT OF THE DISCLOSURE

[0102] A system for facilitating handoff adapted for use with a telecommunications network. The system includes position equipment for determining the location of a mobile transceiver within a region containing a first cell and a second cell. A comparison circuit compares the location with a predetermined handoff area within the region and provides a control signal in response thereto. A handoff initiation circuit initiates handoff of the mobile transceiver between the first cell and the second cell in response to the control signal. In a specific embodiment, the handoff is a hard handoff. The position equipment includes Global Positioning System (GPS) equipment including a mobile unit GPS receiver and signal interface. The comparison circuit includes a positional database that stores latitudinal and longitudinal information corresponding to the predetermined handoff area. The comparison circuit also includes a Code Division Multiple Access selector. The selector begins tracking the position of the mobile transceiver when it is within a predetermined range of the predetermined handoff area. In a specific embodiment, the handoff initiation circuit includes a base station controller. The position equipment includes a base station positional detection system and a mobile unit positional detection system for determining the location of the mobile transceiver. The position database has map information depicting the coverage area of the first and second cells and the predetermined handoff area. The selector runs software for comparing the location to the map information and providing the control signal when the location is within the predetermined handoff area. The base station includes and implements instructions for completing hard handoff in response to the control signal.

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